

LLNL - IPAC
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**LAWRENCE LIVERMORE NATIONAL LABORATORY
OVERVIEW OF LLNL LICENSE AGREEMENT FOR
MICROPOWER IMPULSE RADAR (MIR)
(Not binding, for information only)**

The LLNL MIR license grants a nontransferable, nonexclusive, royalty-bearing license for one or more fields of use. The license will require the payment of an up-front, nonrefundable issue fee, (which varies depending on the number of fields of use licensed), minimum annual royalty fees and/or earned royalty fees. The following provides a quick summary of the terms of this license:

- The licensee gets a nontransferable, nonexclusive, royalty-bearing license to make, have made, use, lease, and sell in the designated field-of-use. The available fields of use are as follows:
 - a. Medical;
 - b. Voice recognition equipment;
 - c. Security and energy conservation;
 - d. Residential, commercial, and industrial automation;
 - e. Transportation;
 - f. Entertainment;
 - g. Material evaluation;
 - h. Tools;
 - i. Communications;
 - j. Underground detection;
 - k. Buried military mine and ordnance detection;
 - l. Military, other than buried mine and ordnance detection;
 - m. Radar camera;
 - n. Negotiated fields of use not expressly listed above.
- The license provides full domestic rights, but only provides limited foreign rights (call LLNL for details).
- The nonexclusive license issue fee depends on the number of licenses purchased. The licensee gets one license for each field of use specified, except for the blanket license, which includes all fields of use. The license issue fee is non-refundable. The fee paid per number of licenses is as follows:

Number of Licenses	Total Cost for All Licenses
1	\$100,000
2	\$125,000
3	\$150,000
4	\$175,000
Blanket (All fields of use)	\$200,000

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- **Minimum Annual Royalty:** At the beginning of the year, the licensee pays a minimum annual royalty fee. The minimum annual royalty fee due depends on the number of licenses.

Number of Licenses	Minimum Annual Royalty
1	\$25,000
2	\$31,000
3	\$37,000
4	\$43,000
All (Blanket)	\$50,000

- **Earned Royalty Fee:** At the end of the year, the licensee must pay an earned royalty fee (minus a credit for the Minimum Annual Royalty – see bullet below). To calculate the earned royalty fee, the licensee uses the percentage from the table below or charges thirty cents (\$0.30) per unit of Licensed Product, whichever is greater:

Cumulative Net Sales of Licensed Products/Systems	Earned Royalty Fee Rate
0 to \$5,000,000	5%
over \$5,000,000 to \$15,000,000	4%
over \$15,000,000 to \$20,000,000	3%
over \$20,000,000	2%

- **Credit for Minimum Annual Royalty:** A licensee can deduct the minimum annual royalty from the amount of earned royalty fees due at the end of the year. For a single field of use, a licensee can deduct a maximum of \$25,000 from the earned royalty fees due.

For licensees with multiple fields of use, the licensee can deduct \$25,000 from the earned royalties in one field of use and can deduct \$6,000 in the other fields of use (Contact an LLNL Business Specialist for an explanation.).

For the blanket license, the licensee can deduct the full minimum annual royalty from the total earned royalty fees due without regard to the field of use.

Other Important terms of the license:

- LLNL requires all potential licensees complete a Commercialization Information form before entering into licensing discussions.
- The licensee obtains no rights to sublicense under the license agreement.
- The licensee must have experience in the development, production, manufacture, marketing and sale of products similar to the "Licensed Products".
- The licensee must diligently proceed with the development, manufacture and sale of Licensed Products and shall earnestly and diligently endeavor to market the same within

a reasonable time (as negotiated by the parties) after execution of the license. The license will require annual performance obligation from the licensee.

- The licensee must provide THE REGENTS with both quarterly royalty reports and an annual audited statement of royalty fees.
- The licensee must keep books and records accurately showing all Licensed Products developed, manufactured (including place of manufacture), used, and/or leased and/or sold or otherwise disposed of under the terms of the license.
- The license agreement remains in force for the life of the last-to-expire issued patent of the Licensed Patents licensed under this Agreement.
- The licensee is not licensed to make, have made, use, lease or sell electronic chips, separate components or circuit boards covered by or derived from THE REGENTS' Licensed Patents or Licensed Products to others independent of an integrated stand alone or end use Licensed Product except for complete functioning circuit boards sold as end products less enclosures to original equipment manufacturers.
- The licensee must comply with applicable FCC rules. These rules are available on the web site for the FCC (www.fcc.gov). (See rules on ultra-wideband).
- The licensee must abide by the United States export control laws.
- The licensee must abide by all applicable regulations of the United States Government.
- The licensee must accept University of California standard terms regarding insurance, warranty, and indemnity,
Insurance
Licensee must insure its activities relating to this Agreement at its own cost with an insurance company acceptable to The Regents. Licensee must provide The Regents with proof of coverage to show compliance with this requirement.

Limited Warranty and Indemnification Language

LLNL is operated by The Regents of the University of California for the U.S. Department of Energy. Any license for LLNL technology will be through an agreement between The Regents of the University of California and the Licensee. Such agreements will contain, but not be limited to, the following nonnegotiable language:

Limited Warranty: This license and the associated Licensed Products are provided without warranty of merchantability or fitness for a particular purpose or any other warranty, express or implied. The Regents makes no representation or warranty that Licensed Products or Licensed Methods will not infringe any third party patent or other

proprietary right. In no event will The Regents be liable for any incidental, special, or consequential damages resulting from exercise of this license or the use of the Invention or Licensed Products.

Nothing in the LLNL license will be interpreted as:

(1) A warranty or representation by The Regents as to the validity or scope of any of The Regents' rights in Licensed Patents;

or

(2) A warranty or representation that anything made, used, sold, or otherwise disposed of under any license granted in this Agreement is or will be free from infringement of patents of third parties; or

(3) Any obligation to bring suit against a third party for patent infringement; or

(4) Conferring by implication, estoppel, or otherwise any license or rights under any patents of The Regents other than Licensed Patents as defined in this Agreement, regardless of whether such patents are dominant or subordinate to Licensed Patents; or

(5) An obligation to furnish to Licensee or any third party any know-how or improvements.

Indemnification: The Licensee agrees to indemnify and hold harmless The Regents and the U.S. Department of Energy, their officers, employees, and agents; the sponsors of the research that led to the Invention; the inventors of the Licensed Patents; and their employers against any and all claims, suits, losses, damages, costs, fees, and expenses resulting from or arising out of the exercise of this license. Licensee shall pay any and all costs incurred by The Regents in enforcing this indemnification, including reasonable attorney fees.

- Attached is a list of the patents licensed under the agreement. (assuming the appropriate field of use).

THE REGENTS' MIR PATENTS

UNITED STATES PATENTS GRANTED:

Invention Disclosure Number	Patent Number	Title	Inventors	Filing Date	Issue Date
IL-9091A	5,345,471	Ultra-Wideband Receiver`	Thomas E. McEwan	4/12/93	9/6/94
IL-9091B	5,523,760	Ultra-Wideband Receiver	Thomas E. McEwan	9/6/94	6/4/96
IL-9092	B1 5,361,070	Ultra-Wideband Radar Motion Sensor Reexamination Certification for: Patent No. 5,361,070 Issued: 11/1/94 Appl. No. 08/044,717 Filed: 4/12/93	Thomas E. McEwan	4/12/93	5/16/00
IL-9197	5,457,394	Impulse Radar Stud Finder	Thomas E. McEwan	5/7/93	10/10/95
IL-9318	5,465,094	Two Terminal Micropower Radar Sensors	Thomas E. McEwan	1/14/94	11/7/95
IL-9340A [Medical FOU only]	5,573,012	Body Monitoring and Apparatus and Method	Thomas E. McEwan	8/9/94	11/12/96
IL-9340B [Medical FOU only]	5,766,208	Monitoring and Imaging Apparatus and Method	Thomas E. McEwan	11/12/96	6/16/98
IL-9426	5,512,834	Homodyne Impulse Hidden Object Locator	Thomas E. McEwan	9/13/94	4/30/96
IL-9514A	5,521,600	Range-Gated Field Disturbance Sensor with Range-Sensitivity Compensation	Thomas E. McEwan	9/6/94	5/28/96
IL-9514B	5,682,164	Pulse Homodyne Field Disturbance Sensor	Thomas E. McEwan	5/28/96	10/28/97

THE REGENTS' MIR PATENTS

UNITED STATES PATENTS GRANTED:

Invention Disclosure Number	Patent Number	Title	Inventors	Filing Date	Issue Date
IL-9515	5,630,216	Micropower RF Transponder with Super regenerative Receiver and RF Receiver with Sampling Mixer	Thomas E. McEwan	9/6/94	5/13/97
IL-9516A	5,510,800	Time-of-Flight Radio Location System	Thomas E. McEwan	9/6/94	4/23/96
IL-9516B	5,661,490	Time-of-Flight Radio Location System	Thomas E. McEwan	4/23/96	8/26/97
IL-9547	5,609,059	Electronic Multi-Purpose Material Level Sensor	Thomas E. McEwan	12/19/94	3/11/97
IL-9567B	5,774,091	Short Range, Micro-Power Impulse Radar with High Resolution Swept Range Gate with Damped Transmit and Receive Cavities	Thomas E. McEwan	5/26/95	6/30/98
IL-9567C	5,757,320	Short Range, Ultra-Wideband Radar with High Resolution Swept Range Gate	Thomas E. McEwan	12/17/96	5/26/98
IL-9595	5,581,256	Range Gated Strip Proximity Sensor	Thomas E. McEwan	6/6/95	12/3/96
IL-9613	5,832,772	Micropower RF Material Proximity Sensor	Thomas E. McEwan	1/27/95	11/10/98
IL-9648	5,519,400	Phase-Coded, Micro-Power Impulse Radar Motion Sensor	Thomas E. McEwan	6/6/95	5/21/96
IL-9649	5,767,953	Light Beam Range Finder	Thomas E. McEwan	6/6/95	6/16/98

THE REGENTS' MIR PATENTS

UNITED STATES PATENTS GRANTED:

Invention Disclosure Number	Patent Number	Title	Inventors	Filing Date	Issue Date
IL-9650	5,576,627	Narrow Field Electromagnetic Sensor System and Method	Thomas E. McEwan	3/17/95	11/19/96
IL-9727	5,589,838	Short Range Radio Locator System	Thomas E. McEwan	8/3/95	12/31/96
IL-9772	5,563,605	Precision Digital Pulse Phase Generator	Thomas E. McEwan	8/2/95	10/8/96
IL-9779	5,661,385	Window-Closing Safety System	Thomas E. McEwan	8/3/95	8/26/97
IL-9797	5,517,198	Ultra-Wideband Directional Sampler	Thomas E. McEwan	8/3/95	5/14/96
IL-9798	5,610,611	High Accuracy Electronic Materials Level Sensor	Thomas E. McEwan	8/3/95	3/11/97
IL-9812	5,883,591	Ultra-Wideband Impedence Sensor	Thomas E. McEwan	2/27/98	3/16/99
IL-9842	5,805,110	Impulse Radar with Swept Range Gate	Thomas E. McEwan	6/17/97	9/8/98
IL-9992	5,754,144	Ultra-Wideband Horn Antenna With Abrupt Radiator	Thomas E. McEwan	7/19/96	5/19/98

UNITED STATES PATENT APPLICATIONS:

Invention Disclosure Number	Patent Application Number	Title	Inventors	Filing Date
IL-9682	10/606,388	Magneto-Radar Detector and Method	Thomas E. McEwan	6/25/03

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